DOCUMENT RESUME

ED 232 387 EC 152 685

AUTHOR	Schopler, Eric; Olley, J. Gregory
TITLE	Comprehensive Training for Personnel Serving Autistic Children, [June 1, 1979 to June 30, 1982].
INSTITUTION	North Carolina Univ., Chapel Hill. School of Medicine.
SPONS AGENCY	Department of Education, Washington, DC.
PUB DATE	27 Sep 82
GRANT	G007901339
NOTE	18p.
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Autism; Elementary Secondary Education; *Inservice Education; *Program Development; Program Evaluation; Public Schools; *Special Education Teachers; Teacher Improvement; *Teacher Role; Training Objectives
IDENTIFIERS	North Carolina

ABSTRACT

A project of comprehensive inservice training for public school teachers and other personnel serving autistic children in North Carolina is described, and objectives and accomplishments are documented. In addition to summer training for teachers of autistic children, a series of four school-year workshops, and a 2-day period of winter inservice training were conducted. Information is provided on the number of educators trained, the number of children served by these educators, and related information broken down by the format in which training was offered. Accomplishments and areas of difficulty are described for 16 objectives including the following: participants will outline a comprehensive plan for their own class and its relation to families and the rest of their school; participants will complete short- and long-term evaluations of training; participants will form a relationship with the training staff that will continue and provide for better integration of services; participants will receive credit toward certification in the area of emotionally handicapped; participants will have a plan for offering inservice training regarding autism to their principal and their school; participants will demonstrate appropriate use of skills during followup visits; participants will complete evaluation forms; a complete training and evaluation package for personnel serving autistic children and their families will be developed; and a cooperative plan for national standards will be completed. (SEW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED232387

Title: Comprehensive Training for Personnel Serving Autistic Children
Agency: University of North Carolina at Chapel Hill, School of Medicine, Division TEACCH, Department of Psychiatry, 214 Medical School Wing B, 207H, Chapel Hill, North Carolina 27514
Grant Number: G007901339

Schopler, Eric; Olley, J. Gregory

Description of Types of Training, Numbers of Trainees, Etc.

This project was funded from June 1979 through May 1982, with a no cost time extention through the end of June 1982. The purpose of the project was to provide in-service training for teachers and related personnel serving children with autism in public schools in North Carolina. Training took place in four formats: **(a)** two weeks of summer training for new teachers in North Carolina who were to teach classes for autistic children, **(b)** one week of training in the summer for special education teachers serving autistic children in other than self-contained classes for autistic children, **(c)** a series of four workshops during the school year, **(d)** a two day period of in-service training for teachers of autistic children in North Carolina each winter. The training was provided by the staff of Division TEACCH. The number of educators trained, the number of children served by these educators, and related information are broken down by the format in which training was offered, and this information is summarized in Table 1.

The training served teachers in classrooms affiliated with Division TEACCH who taught in self-contained classrooms for children with autism. In-service training was also provided for teachers who served one or more autistic children in another type of classroom, most often classes for the severely handicapped, the trainable mentally handicapped, or the multiply handicapped. In the bottom left corner of Table 1, this information

EC152685

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

TABLE 1

Type of Training	Number of Teachers Attending	Number of Assistants Attending	Number of Children In These Classrooms	Number of Autistic Children	Age Range
Workshops					
Western	20	11	217	23	6mo.-21yrs
Eastern	16	2	140	28	2-19
Southeastern	26	2	251	49	1-20
South Central	28	2	294	28	3-18
Piedmont	14	3	138	8	3-21
TOTALS	104	20	1,040	136	6mo.-21yrs
Other Participants - 2 School Psychologists, 1 Director, 1 Rehabilitation Counselor 1 Speech Therapist.					
NonTEACCH Summer Training	50	9	552	55 **	2mo.-21
Other Participants - 2 Speech Therapists, 2 Directors, 2 Resource Teachers, 1 Education Coordinator					
TEACCH Summer Training	16	27	207		6-21
TOTAL NUMBER SERVED	182	56	1,799 *		2mo.-21 yrs

* This does not include the children in the "Other Participants" category - information unavailable.

** 1980 and 1981 only -information unavailable in 1979.

Participants'Classrooms Number

TMH	60	
Multi-handicapped	30	
TEACCH Affiliated	28	(summer training)
S/P	20	
Emotionally Handicapped	15	
Autistic	13	(nonTEACCH)
EMH	14	
Developmental Day Care	7	
LD	4	
Directors	3	
Speech Therapist	3	
School Psychologists	2	
Resource Teachers	2	
Rehabilitation Counselor	1	
Education Coordinator	1	

Average Number at Inservice per Year

Therapists	31
Assistants	30
Teachers	28
Group Homes	17
Clinical Directors	5
Other	13
A@R	
Research	
Students	

regarding the type of classrooms in which the teachers worked is summarized.

The rationale for the four types of training was based upon the different needs of teachers in classes specifically designed for autistic children and other types of classes and also the varying levels of experience of different teachers. The emphasis in the summer training was upon direct experience with autistic children in a demonstration classroom. Experienced teachers selected by Division TEACCH provided supervision and demonstrated teaching procedures. This has been our preferred format, because it enables teachers in training to get direct experience and feedback on their performance. It is not always possible to offer training in a demonstration classroom, however. An additional approach was offered by having a series of four workshops, each on a specific topic during the school year. Each of the five regional TEACCH Centers offered such workshops during the three years of this project. The topics covered in these workshops are indicated in Table 2.

The purpose of the annual winter in-service training was to allow teachers and other TEACCH staff from throughout the state to have an opportunity to exchange information with each other and to hear a formal presentation by a nationally known speaker. During the three years of this project presentations were made by Dr. Carolyn Schroeder on working with families, by Dr. Lou Brown on curriculum for severely handicapped students, and by Dr. Sandra Harris on the approaches to education of autistic children used in her program.

All of the above activities were carried out as proposed in the original project application, and the project did provide inservice training to the projected number of teachers. The following information is a summary of the objectives in the original application and an indication of the accomplishments of the project.

Summer Initial Training

Objective 1: Participants will attain the specified objectives or contract for specific steps to do so.

a. **Accomplishments and milestones met**. Prior to attending summer training, all participants completed a questionnaire in which they indicated their background and their own objectives for training. During training each participant was assigned a consultant who worked with the individual to determine specific goals for training. This approach to individualization was considered to be more satisfactory than to ask all participants to attain the same set of objectives. During the training the consultants met with the participants on a regular basis and reviewed progress. At the end of training, the consultants pointed out objectives which still needed work, and a summary of each participant's progress was given to the consultant who provided follow-up help in each participant's classroom. This system of follow-up consultation by a TEACCH staff member from the regional TEACCH center is a central part of our in-service training model. It provides continuity and allows the participating teacher to continue to work on objectives throughout the school year. The consultants visited each of the participating teacher's classrooms

Table 2

TOPICS COVERED IN WORKSHOPS

1979-80

Language/Auxiliary Forms of Communication
Behavior Management
Prevocational/Vocational Training
Classroom Structure/Management
Working With Parents
Teaching Techniques
Individualized Instruction

30% of the workshops covered at least two topics in one day.

1980-81

Language/Auxiliary Forms of Communication
Behavior Managment
Classroom Organization/Structure
Prevocational/Vocational Training
Working With Parents
Assessment
Teaching Techniques

35% of the workshops covered at least two topics in one day.

Each center covered two topics at least once.

1981-82

Language/Auxiliary Forms of Communication
Behavior Management
Classroom Organization
Prevocational Training/Independent Work Skills
Working with Parents
Assessment
Autism
Teaching Techniques

at least three times during the school year. Evaluation of the teacher's progress was done by the Division TEACCH Competency Rating Form.

b. **Slippages in attainment and reasons for the slippages.** The Division TEACCH Competency Rating Form was developed and revised over the three years of the project, and it is still undergoing revision. Due to this ongoing revision, it is impossible to have satisfactory data or to compare data from one year to the next. Although this process did not allow us to assess the acquisition of competencies in objective terms, it did serve to focus the activities of the classroom consultant upon those competencies judged to be most important for that teacher. For the last two years of the project, pre-post tests of knowledge were also used to measure attainment of objectives. The results of these tests are discussed below in the section on evaluation.

Objective 2: Participants outline a comprehensive plan for their own class and its relation to families and the rest of their school.

a. **Accomplishments**. As mentioned above, by the end of training the participating teachers designed with their consultant a plan for carrying over their new skills to their classroom. Specific activities, including involvement of parents and the rest of the school were included. The follow-up visits from TEACCH consultants were helpful in assuring that this plan was carried out.

b. **Slippages**. None.

Objective 3: Participants complete short-term and long-term evaluation of training.

a. **Accomplishments**. At the end of training, all participants completed an evaluation form indicating their satisfaction with various aspects of training. For the first two years of the project, participants were asked to complete a similar questionnaire four months later. This information was valuable in revisions of the training; however, the long-term evaluations did not differ in any substantial way from the evaluations immediately after training. Therefore, in the last year of the project the long-term evaluations were not completed.

b. **Slippages**. None

Objective 4: Participants form a relationship with TEACCH staff which will continue and provide better integration of services.

a. **Accomplishments**. Information on this objective was not part of our formal evaluation plan; however, informal information indicated that this objective was accomplished. Participants in various forms of training on many occasions referred other teachers in their school systems to TEACCH for training. They also referred children in their classes or in other classes in their school district to TEACCH for evaluation.

b. **Slippages**. None

Objective 5: Participants receive credit toward certification in Emotionally Handicapped.

a. **Accomplishments**. All participants received, at their request, either Continuing Education Units from the University of North Carolina or credit from the North Carolina Department of Public Instruction to be used for either initial certification or renewal of current certification.

Many teachers also received credit toward renewal of certification in areas other than emotionally handicapped.

b. **Slippages.** None.

Objective 6: Participants have a plan for offering in-service training to their principal and their school regarding autism.

a. **Accomplishments.** One of the original intentions of the project was that teachers who had received training would be able to pass that information on in a systematic way within their schools and/or school systems. The teachers who attended the summer training were a particularly well-motivated group, although their skills varied widely. Teachers in classes affiliated with TEACCH, in nearly all instances, offered some type of information about their classes and about autism in general to other teachers and to their community. Follow-up visits and continued support from TEACCH aided in designing and carrying out such dissemination.

Teachers from other types of classes (e.g., classes for the severely handicapped that also served an autistic child) were less systematic in their dissemination efforts but some dissemination did occur.

b. **Slippages.** The original plan of a "multiplier effect" in which teachers who received training could pass information on to others did occur, but it did not involve as many teachers as originally planned. For teachers who already had strong basic teaching skills, TEACCH training and consultation made dissemination feasible. For teachers who entered training with poor basic teaching skills, the focus of training had to be on specific problems in the classroom. Dissemination by these teachers,

thus, was given a lower priority. Since inservice training is time limited, the time was spent remediating basic skills instead of preparing the teachers to disseminate information.

Winter Workshop Series

Objective 7: Participants gain a basic familiarity with the specialized topics and demonstrate appropriate use of them during follow-up visits.

a. **Accomplishments**. In the final year of the project, pre- and post-test measures of knowledge were administered at each workshop. The data analysis indicated improvement in scores from pre- to post-tests. The use of pre- and post-tests also helped the training staff to identify the areas in which their presentations were not clear. If a particular piece of information was frequently missed in the post-test, the trainer presented that information again in the next workshop to insure that it was understood.

b. **Slippages**. The pre- and post-tests of knowledge underwent considerable revision over the three years of the project. The early trys at a multiple choice format did not yield information that the trainers found to be useful. The format was changed to a short answer, and although this made the scoring less objective, it gave the trainers more complete feedback about where the trainees misunderstood the information that had been presented. The process of constructing questions also helped the trainers to set priorities and focus on specific points that they wished to emphasize in their presentations. The TEACCH Competency Rating Form also underwent considerable revision over the three year period and is

still being used and revised. The project budget did not allow enough personnel to obtain scorer reliability measures for the instrument, and we found that in a relatively brief observation period not all relevant items could be observed. Therefore, the process of revision of the form is a slow one. Nevertheless, the process of specifying teaching competencies that can be observed has been helpful to the training staff in clarifying those skills to be taught and to be observed during follow-up visits.

Objective 8: Participants complete evaluation forms.

a. **Accomplishments**. All participants completed satisfaction questionnaires following each workshop.

b. **Slippages**. None.

Objective 9: Participants form a relationship with TEACCH staff which will continue and provide better integration of services.

a. **Accomplishments**. Informal reports indicated that TEACCH staff were able to make more frequent contact with personnel in school systems with which they had not worked previously. Personal relationships led to suggestions for future training, referral of new children for services, and better cooperation in educational services for autistic children.

b. **Slippages**. None

Objective 10: Participants receive credit toward certification in emotionally handicapped.

a. **Accomplishments**. All participants received credit as planned.

b. **Slippages**. None

Objective 11: Participants have a plan for offering in-service activities

to their principal and their school on the topic of autistic children in public schools.

a. **Accomplishments**. The follow-up questionnaires asked participants in the workshops to indicate with whom they shared information about autism and in what way. The respondents indicated a frequent sharing of information with other teachers through either informal or formal presentations and conversations. Also parents and other school personnel were provided with information.

b. **Slippages**. This sharing of information did not happen in as formal a way as we had hoped for, because the information given to the participants was usually very specific to their classroom.

Evaluation

Objective 12: Formative and summative data for program revision and dissemination are collected.

a. **Accomplishments**. All of the anticipated forms of evaluation data were collected. They were of three types. At the conclusion of all the training activities, the participants completed a questionnaire assessing their satisfaction with all aspects of training. A pre and post-test of knowledge was administered in the final year of the project. Participants in both the summer training and the winter workshop received followup visits in which the TEACCH Competency Rating Form was used to assess teaching skills in the classroom. Formative data were collected as the training activities took place, and all anticipated training activities

were completed on schedule. The satisfaction questionnaires were useful to the training staff in identifying problem areas and making changes for future training. The training Advisory Group met once a year and provided very useful recommendations for the direction of our training efforts. Most of the members of the Advisory Group were distinguished educators in North Carolina, and these meetings also were very helpful in continuing our future cooperative relationships within the state.

b. Slippages. Problems in the development of evaluation instruments have been mentioned above.

Objective 13: Improvement of evaluation instruments.

a. Accomplishments. As indicated above, all of the evaluation instruments were revised with use over the course of the project. They will continue to be used and refined in the future.

b. Slippages. All evaluation instruments were improved to some extent, although continuing improvements are needed.

Dissemination

Objective 14: A complete training and evaluation package for personnel serving autistic children and their families will be developed.

a. Accomplishments. Through this project the training formats and competencies for teachers of autistic children have been more clearly specified, and a basis has been established for training which is continuing through Division TEACCH. Division TEACCH also has a contract from the Office of Special Education for the development of curricula for autis-

tic children and adolescents. The goals of that contract and this training project complement each other well. Although the activities of this training project have not been compiled in a finished training package, this effort is continuing, and it will be integrated with the curriculuim development activities such that the result will be a comprehensive program of training for teachers of autistic children. Both the content of TEACCH training activities and the methods of training shown to be most effective by our evaluation will be the basis for the TEACCH training manual, which will be completed in the coming year.

b. **Slippages.** The development and implementation of evalulation instruments and the specification of the content of training did not occur on schedule during the project. Many of the evaluation approaches were not completely in place until after the first year. As mentioned above, a complete training package will be completed in the coming year.

Coordination and Planning

Objective 15: A clear understanding of the cooperative activities of TEACCH and other individuals and agencies providing in-service training in North Carolina will be established. This plan will be statewide and cost-effective.

a. **Accomplishments.** This project has had a tremendous effect upon Division TEACCH's capability for providing training in North Carolina and in other states. The relationship with other agencies through the Advisory Group and through other informal meetings has improved considerably. Division TEACCH has been well recognized within North Carolina

and throughout the United States as a resource for training for teachers of autistic children. A more formal cooperative arrangement has been made between Division TEACCH and the Division of Special Education on this campus to include information about autism in the curriculum for graduate students in special education. Contacts have been made with the other teacher training institutions in North Carolina, and these schools are using classrooms affiliated with Division TEACCH as field placement sites for their students. Visitors from North Carolina and other states are spending time in the regional TEACCH centers and consulting with TEACCH staff with regard to the establishment of educational services for autistic children in other locations.

b. Slippages. No formal, written plan for cooperation among agencies in the provision of in-service training for teachers of autistic children has been established. The informal relationships between Division TEACCH and other agencies have been strong, and no need for such a formal statement has been established.

Objective 16: A cooperative plan for national standards will be completed in cooperation with the National Society for Autistic Children.

a. **Accomplishments.** Division TEACCH has continued its close cooperative relationship with the National Society for Children and Adults with Autism (NSAC). In August 1981, NSAC received a training grant from the Office of Special Education to provide training for trainers of teachers of autistic children in selected states. Personnel from Division TEACCH have contributed to this NSAC project and contributed toward an informal

national plan for in-service training coordinated through NSAC. Thus, the continued impact of this project i n North Carolina and on a national level is assured.

b. **Slippages**. None.

Unanticipated or Anticipated Spinoff Developments

The most important outcome of this project is that it gave Division TEACCH a better capacity to provide training for teachers of autistic children. The staff of Division TEACCH has been providing training in a variety of ways for about 10 years; however, this project gave the resources to bring together many of the necessary people and activities to specify the content and formats of training that are most effective. The process of training and evaluation of training helped to focus and to create priorities. In addition, through this project TEACCH has become a much more visible resource for training. We are continuing to provide training to the teachers of autistic children in North Carolina, and the requests for training from teachers in other states has increased markedly. For instance, during 1982, the state of Virginia provided funds for seven new educational programs for autistic children. Of these seven programs, four requested training from Division TEACCH, and this was provided during the summer of 1982. The cooperation between North Carolina and Virginia in the training of teachers and the provision of educational services for autistic children has improved greatly. This training project provided many of the resources that made this cooperation possible.

Matters Which we Would Like the Department of Education to Know About

Most teachers of autistic children have very little or no formal training to work with this population. Even if training in pre-service teacher training programs increases a great deal, there will continue to be a strong need for in-service training for teachers of autistic children. The support of the Department of Education in providing such inservice training through this project and other projects such as that of the National Society for Children and Adults with Autism is very valuable. The experience of this project has indicated that the need for such training is great, but there are limitations to inservice training.

Selection of trainees is a very important consideration. Many times the teachers with the greatest need are not the best candidates for inservice training. A good candidate is one who is highly motivated and already has good basic teaching skills. The inservice training can then be directed at specific needs and can be effective in the limited time available.

Training should be directed at teaching very specific skills that are needed by the participating teachers. To accomplish this, a variety of formats, such as those used in this project, is valuable. Inservice training must often be delivered to teachers who are located throughout a large geographical area and whose time is limited. The travel cost and the importance of working with small groups can make inservice training very expensive. Thus, inservice training is not a cost-effective way to provide extensive training. Some of the participants in our training

had such extensive problems that it was not effective to try to remediate them through inservice training. The most effective format for training was found to be one in which the participants were actively involved in a classroom for autistic children. All of our evaluation data consistently indicated that the most successful activities were those that were done in a classroom or involved the observation of a classroom. Training activities that involved participation in general were successful, whereas, those passive activites such as lectures were consistently less successful. This does not mean that all inservice training must be in a demonstsration classroom, but it does mean that training must involve participation around issues that are relevent to the individuals involved. The type of active participation, problem-solving, practice, etc. may vary, but it must exist. Future training activities will be most successful if they take this approach of targeting their populations and the skills to be taught and doing the training in a format in which the participants can be involved in the learning process.